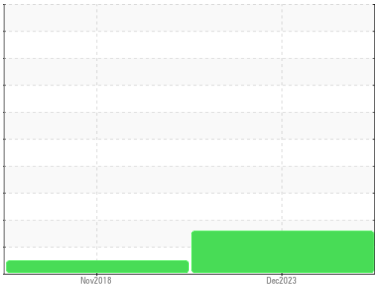
FUEL REPORT

Sample Rating Trend



WATER

Area
[102306]
Machine Id
PMO
Component
Diesel Fuel
Fluid
No.2 DIESEL FUEL (LOW-SULPHUR) (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you filter this fluid before use. We recommend an early resample to monitor this condition.

Corrosion

{not applicable}

Contaminants

There is a light concentration of water present in the fuel. There is no bacteria or fungus (yeast and/or mold) present in the sample. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fuel Condition

The fuel is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**CU0020738**	CU	---
Sample Date		Client Info		**05 Dec 2023**	18 Nov 2018	---
Machine Age	kms	Client Info		**0**	0	---
Sample Status				**ABNORMAL**	NORMAL	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	**0.831**	0.821	---
Fuel Color	text	Visual Screen*	Yllow	**Red**	Pink	---
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	**2.2**	1.9	---
Pensky-Martens Flash Point	°C	ASTM D7215*	52	**54.5**	52	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	250	**16**	41	---

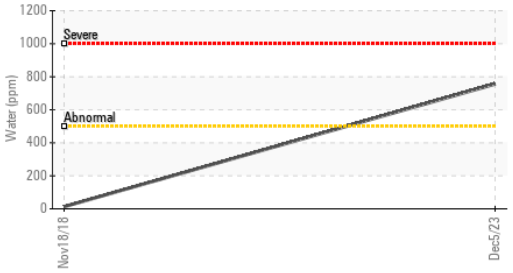
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	**164**	158	---
5% Distillation Point	°C	ASTM D2887*		**186**	179	---
10% Distill Point	°C	ASTM D2887*	201	**195**	186	---
15% Distillation Point	°C	ASTM D2887*		**202**	192	---
20% Distill Point	°C	ASTM D2887*	216	**209**	198	---
30% Distill Point	°C	ASTM D2887*	230	**222**	210	---
40% Distill Point	°C	ASTM D2887*	243	**235**	222	---
50% Distill Point	°C	ASTM D2887*	255	**248**	234	---
60% Distill Point	°C	ASTM D2887*	267	**261**	247	---
70% Distill Point	°C	ASTM D2887*	280	**275**	261	---
80% Distill Point	°C	ASTM D2887*	295	**291**	277	---
85% Distillation Point	°C	ASTM D2887*		**303**	287	---
90% Distill Point	°C	ASTM D2887*	310	**315**	299	---
95% Distillation Point	°C	ASTM D2887*		**336**	317	---
Final Boiling Point	°C	ASTM D2887*	341	**365**	331	---
Distillation Residue	%	ASTM D86(e)*	3.0	**---**	1.3	---
Distillation Loss	%	ASTM D86(e)*	3.0	**---**	0.8	---

IGNITION QUALITY	method	limit/base	current	history1	history2
API Gravity	ASTM D1298*	37.7	**38**	40.9	---
Cetane Index	ASTM D4737*	<40.0	**49**	49.0	---

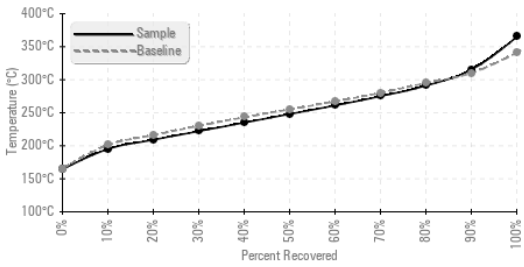
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	**0**	0	---
Sodium	ppm	ASTM D5185(m)	<0.1	**0**	<1	---
Potassium	ppm	ASTM D5185(m)	<0.1	**<1**	0	---
Water	%	ASTM D6304*	<0.05	▲ **0.075**	0.001	---
ppm Water	ppm	ASTM D6304*	<500	▲ **756**	13.0	---

FUEL REPORT

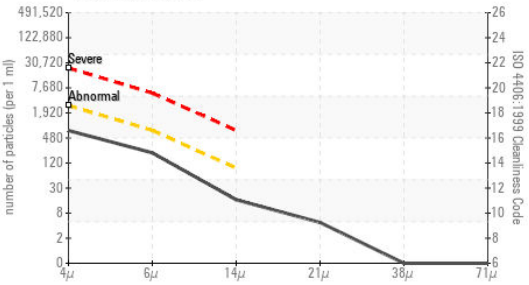
Water (KF)



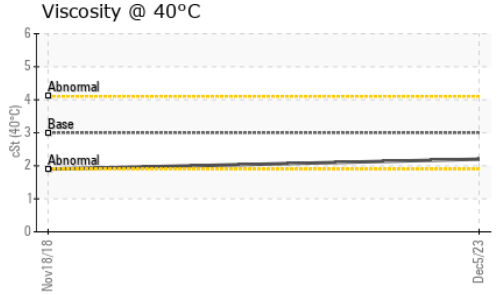
Fuel Distillation Curve



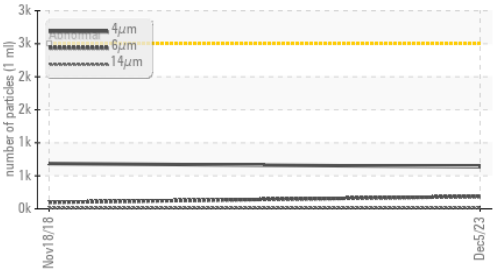
Particle Count



Viscosity @ 40°C



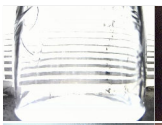
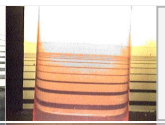
Particle Trend



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	**637**	685	---
Particles >6µm		ASTM D7647	>640	**186**	98	---
Particles >14µm		ASTM D7647	>80	**14**	10	---
Particles >21µm		ASTM D7647	>20	**4**	4	---
Particles >38µm		ASTM D7647	>4	**0**	0	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	**16/15/11**	17/14/10	---

MICROBIAL		method	limit/base	current	history1	history2
Bacteria	CFU/ml	ASTM D6469*	>=100000	**0**	---	---
Yeast	CFU/ml	ASTM D6469*	>=100000	**0**	---	---
Mold	Colonies	ASTM D6469*	MODER	**NONE**	---	---

HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	**0**	0	---
Nickel	ppm	ASTM D5185(m)	<0.1	**0**	0	---
Lead	ppm	ASTM D5185(m)	<0.1	**0**	0	---
Vanadium	ppm	ASTM D5185(m)	<0.1	**0**	0	---
Iron	ppm	ASTM D5185(m)	<0.1	**<1**	0	---
Calcium	ppm	ASTM D5185(m)	<0.1	**<1**	<1	---
Magnesium	ppm	ASTM D5185(m)	<0.1	**0**	0	---
Phosphorus	ppm	ASTM D5185(m)	<0.1	**<1**	0	---
Zinc	ppm	ASTM D5185(m)	<0.1	**0**	0	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0020738 **Recieved** : 14 Dec 2023
Lab Number : 02603348 **Diagnosed** : 27 Dec 2023
Unique Number : 5696433 **Diagnostician** : Kevin Marson
Test Package : FUEL (Additional Tests: BACTERIA, CC Flash, GC-PercFuel, PrtCount)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

CUMMINS EASTERN CANADA LP
3189 SWANSEA CRESCENT
OTTAWA, ON
CA K1G 3W5
Contact: Cindy Harrison
cindy.harrison@cummins.com
T: (613)736-1146
F: x: